

Alloy Designation

EN

DIN CEN/TS

UNS

Chemical Composition (Balance)

Weight percentage

Cu	≥ 99.90	%
Sn	0.003 – 0.020	%
Te	0.003 – 0.020	%
P	0.001 – 0.010	%

Characteristics

CuTe0.02Sn0.02 is a solid solution strengthened copper alloy (tellurium and tin additions). The Zuphen produced thin gauge strip is primarily used for radiator fin applications. The alloy has excellent thermal properties. Hot and cold formability is good (which makes it ideal for engine cooling applications where heat transfer is critical). The addition of tellurium and tin improves mechanical properties and increases the anneal resistency.

Mechanical Properties (EN 1652)

Temper	Tensile Strength	Yield Strength Minimum	Elongation* Minimum	Hardness
	Rm	Rp _{0.2}	A _{50mm}	HV *
	MPa	MPa	%	HV
R220	220 .. 275	80	15	53 .. 65
R255	255 .. 315	190	4	80 .. 100
R260	260 .. 330	210	3	85 .. 110
R280	280 .. 360	240	1	95 .. 120
R330	330 .. 410	300		105 .. 130
R355	355 .. 435	330		115 .. 140
R390	390 .. 475	370		125 .. 150

* only for information

Physical Properties

Typical values in annealed temper at 20 °C

Density		8.93	g/cm ³
Thermal expansion coefficient	20 .. 300 °C	17.7	10 ⁻⁶ /K
Specific heat capacity		0.385	J/(g·K)
Thermal conductivity		360	W/(m·K)
Electrical conductivity	MS/m	53	MS/m
Electrical conductivity	IACS	92	%
Modulus of elasticity	GPa	120	GPa

Cold formability

Cold formability	Excellent (decreasing with higher hardness levels)
Hot formability	Good (decreasing with higher hardness levels)
Brazing / Soldering	Excellent
Welding	Good

* Für weitere Informationen rufen Sie unseren technischen Dienst an